

1980 Editorial Index

PULP & PAPER

By: Subject • Company • Country • Author

Complete listings of all feature articles and news stories published in 1980 issues of PULP & PAPER. Article listings are by subject matter, by company, and by author. News stories are listed by company, and articles and news stories covering activities outside North America are listed under the name of the foreign country. (BG = Buyers Guide, November 15 issue.) Additional copies of this index may be obtained at \$5/copy from: PULP & PAPER 1979 Editorial Index, 500 Howard St., San Francisco, CA 94105

Index by Subject

Chemicals

Bleaching chemicals produced using salt, water	Oct 185
Bleaching expert discusses increased use of peroxide	Jan 156
Boiler water treatment series—corrosion protection	Jan 109
Chemical supply for Canadian pulp and paper industry	Oct 72
Chemical supply for U.S. pulp and paper industry	Oct 72
Chlorine dioxide is effective biocide in alkaline whitewater	Aug 140
Chlorine dioxide use—ways to cut costs, energy use	Oct 152
Combination chemical recovery maximizes pulping flexibility	Nov 119
How to optimize TMP peroxide bleaching	Nov 127
Metal chelants improve bleaching of TMP	Oct 108
Methanol recovery offers energy savings	Apr 171
Mutant bacteria used in wastewater treatment	Feb 172
Proper selection/use of defoamers	Mar 116
Regulations affect use, development of additives	Mar 68
Skim tank key to optimum CTO recovery	May 184
TMP brightness improved with hydrogen peroxide bleaching	Jun 156
World naval stores production is up; fails to meet demand	Dec 114

Coating/sizing

Adhesives/binders—listing of those currently in use	BG 15
Backwashing eliminated with self-cleaning strainer	May 161
Blade size press allows higher solids coating	May 130
Coated grades see no recession ahead	May 71
Coated paper capacity expansion at two Fabocart mills (Italy)	May 180
Coater control systems offer efficiency/flexibility	May 100
Coating conference looks at computer control, plastic pigments	Jul 160
Coating improved with fault-detection system	Feb 148
Improved techniques enhance quality, cut pigment loss	May 63
Paper pigments in high demand; some supplies short	May 124

Energy conservation

Air systems are source of energy savings	Apr 74
API reports industry nearing 1980 energy reduction target	Jun 134
Bark drying increases boiler efficiency, boosts cogeneration	Sep 80
Centrifugal vacuum system can reduce energy, water use	Dec 142
Chlorine dioxide use—ways to cut costs, energy use	Oct 152
Closed screening offers energy savings for TMP, kraft pulp	Jul 132
Coal-oil-water combination is potential lime kiln fuel	Aug 137
Comment—Cellulose and its bio-energy value	Dec 218
Comment—The case for materials recovery	Jun 276
Computer control cuts energy costs at Union Camp mill (Va.)	Feb 123
Computer system reduces boiler steam usage	Aug 97
Conversion of solid waste into fuel yields energy savings	Nov 105
Efficient turbine drives can reduce mill energy costs	Sep 170
Energy costs reduced through modified power, hog fuel use	Sep 191
Energy use reduced in dryer section	May 93
Flash dryers save fuel in lime kiln production	Feb 178
Former landfill material generates mill steam	May 129

Heat exchanger improves energy use, effluent treatment	May 160
High energy costs and consumption—what to do?	May 150
Improved boiler efficiency at Nekoosa Port Edwards	Apr 72
Lime kiln heat balance can reduce fuel consumption	Sep 77
Low-temperature dispersion system cuts steam energy use	Jul 186
Methanol recovery offers energy savings	Apr 171
Optimizing refiner operation	Mar 165
Pressurized grinding offers energy savings	Jun 76
Production decrease saves energy, sustains profits	Sep 164
Reducing energy consumption in a dryer section	Jan 160
Reinjected cinders increase hog-fuel-fired boiler efficiency	Aug 143
Swedish mill saves energy, production costs with "steam dryer"	Jun 186
Two-stage batch digester steaming reduces energy use	Dec 68
Washington Viewpoint—Windfall energy savings	May 33

Engineering

A.C. drives give motors a.c. advantages, d.c. control	BG 48
A.C. helper motors used at idler rollers	BG 62
Bark dryer cuts fuel oil use, improves boiler efficiency	Dec 96
Bark drying system increases boiler efficiency, cogeneration	Sep 80
Barker rebuild cuts maintenance costs, downtime	Sep 188
Boiler baghouse efficiency is improved with modifications	BG 50
Boiler water treatment series—corrosion protection	Jan 109
Ceramic coating extends life of paper machine components	Jun 163
Closed screening offers advantages for TMP, kraft pulp	Jul 132
Coal dust effectively checked by wet suppression	Oct 157
Computer system reduces boiler steam usage	Aug 97
Consolidated's new kraft furnace increases production	Jul 82
Construction contracts: criteria and alternatives	Sep 74
Corrosion in heat exchanger tubing reduced using special alloy	Sep 200
Deminerizer system reduces boiler maintenance costs	Jun 182
Disposable chipper knife used in Scandinavia	Feb 181
Efficient turbine drives can reduce mill energy costs	Sep 170
Effluent pumping problems solved at Brunswick (Ga.)	Jul 189
Energy, design economics discussed at engineering meeting	Jan 152
Energy savings in dryer section	Jan 160
Evaporator scaling research at IPC/Westvaco	Mar 156
Former landfill material used to generate steam (Wash.)	May 129
Fox River saves wastewater surcharges with strainer	Mar 139
Galvanized coatings are cost-effective for mill structural steel	Sep 130
Good system design is best preventive maintenance	Mar 162
Grooved rolls replace first press suction rolls	Jun 104
Heat exchanger improves effluent treatment, energy use	May 160
Hog-fuel-fired boilers aided by reinjection of cinders	Aug 143
Hog fuel, power usage modification reduces energy costs	Sep 191
Insulation of dryer heads is profitable for mill	Oct 184
ITT raises digester capacity	Jun 106
Kiln maintenance costs cut with reinforced castables	Nov 154
Lubricating plain bearing on older paper machines	Dec 54
Lubrication—applications of solid-film lubricants	BG 27
Maintenance survey: current trends in mill maintenance	Dec 108

Mechanical ash-handling vs pneumatic/hydraulic systems	Mar 63
Metering pumps—guidelines for design selection	BG 24
Modified ultrasonic flowmeter measures pipe liquid velocity	Sep 140
Nekoosa improves boiler efficiency at Port Edwards	Apr 72
Noise-abatement program improves woodyard conditions	Sep 198
Optimum refining with less energy—principles and design	Mar 165
Pipe-replacement costs can be cut with use of right alloy	Dec 135
Polyvinylidene coating protects felt rolls from corrosion	Dec 63
Proper lubrication can extend bearing life	Apr 106
Recovery operations improve as result of testing residual alkali	Jun 191
Refiner packing life extended through use of synthetic seals	Jul 188
Refiners use in-line transmitter for freeness control	Feb 128
Safety-awareness campaign can prevent warehouse accidents	Dec 118
Safety management techniques for supervisors	Sep 166
Scandinavia lowers energy use; U.S. mills can benefit also	May 150
Sludge basins cleaned automatically	Jan 138
Small-motor maintenance—how to prolong motor life	Dec 92
Sonic sootblower can help maintain recovery boiler efficiency	Sep 196
Starch cookers improved with special heaters	Apr 150
Swedish mill utilizes "steam dryer" for energy savings	Jun 186
Trouble-free operation of doctors—Part 1	Apr 146
Trouble-free operation of doctors—Part 2	May 188
Unique Converflo headbox improves sheet surface at L-P	Jun 82
Using air-powered diaphragm pumps to reduce downtime	Nov 177
Valve repairs cut mill maintenance time and costs	Jun 166
Vibration analysis program can prevent equipment failures	Sep 83
Vibration-monitoring program cuts downtime at Scott Paper	Dec 64
Welded-steel chain saves repair, maintenance of kiln drag chain	Dec 139
Well-designed skim tank is key to optimum CTO recovery	May 184
Wood storage tank for sulfite pulp installed at Publishers	Oct 106

Environmental control—air/water quality

Comment—Clean Air Act: problems with PSD	Nov 242
Comment—EPA turning new source review on its head	Feb 266
Computer system reduces boiler steam usage	Aug 97
Effluent pulping problems solved at Brunswick (Ga.)	Jul 189
Engineering consultant examines environmental legislation	Jul 104
Green Bay Packaging uses baghouse for particulate removal	Feb 107
Hazardous waste regulations guidelines	Aug 118
Hazardous waste regulations, superfund topics at forum	Sep 134
Hazardous waste regulations—their impact on paper industry	Nov 144
Heat exchanger improves effluent treatment, energy use	May 160
Industry nearing EPA guidelines for air/water quality	Jan 135
Menasha closes whitewater system/meets effluent standards	Mar 60
Methanol recovery offers energy savings	Apr 171
Mutant bacteria used in wastewater treatment	Feb 172
Oxygen bleaching—economics of O ₂ bleaching, biological treatment	Mar 92
Oxygen bleaching—industry expert examines O ₂ potential	Mar 87
Oxygen bleaching may be able to reduce effluent problems	Mar 92
Review of current technology used in monitoring emissions	Jul 124
Secondary treatment systems online at G-P Bellingham	Jul 180
Sludge-disposal costs reduced with land-application program	Nov 151
Solid waste is converted to fuel at Abitibi-Price mill	Nov 105
TAPPI environmental conference focuses on compliance	Jul 183
Washington Viewpoint—BCT and EPA	Jan 39
Washington Viewpoint—Blum's blundering	Jul 39
Washington Viewpoint—Environment and the election	Dec 37
Washington Viewpoint—Industry may get cleanup tab	Apr 41
Washington Viewpoint—Regulating on a clear day	Aug 41
Washington Viewpoint—Unfinished business	Oct 43
Waste treatment facilities upgraded at Scott (Ala.)	Feb 98

Expansion/modernization

Abitibi rebuilds barker, reduces costs, downtime (Mich.)	Sep 188
API surveys future industry growth	Feb 155
Bear Island newsprint mill comes on-line	Apr 65
Bowater Southern operates largest newsprint mill in North America	Feb 73
CFI's expansion ups linerboard capacity (Ga.)	Jan 102
Champion's Courtland expansion sees near-flawless startup	Jul 94
Consolidated-Bathurst completes expansion at newsprint mill	Feb 70
Consolidated's new kraft furnace increases production	Jul 82
Consolidated starts up new machine at Whiting	Aug 93
Diamond International's recycled fiber boxboard mill on-line	Jul 74
Fraser expands printing paper capacity (Maine)	Sep 102
G-P Bellingham mill brings secondary treatment systems on-line	Jul 180
G-P's new tissue machine raises capacity 50% (N.Y.)	Oct 126
Great Northern rebuilds printing paper machine (Maine)	Oct 123

Green Bay Packaging starts up new boiler/baghouse system	Feb 107
Groveton rebuilds medium machine, adds couch press	Sep 107
K-C's fluff pulp expansion at Coosa Pines	Jun 128
L-P installs unique Converflo headbox at Antioch	Jun 82
MB upgrades in-plant core manufacture at Powell River	Dec 58
MB's new bin activators end flow problems in chip silos	Jun 162
MB's Port Alberni modernization improves liner production	Sep 110
Midtec completes \$85-million expansion (Wis.)	Nov 94
Multifourdrier produces high-quality, specialty papers	Feb 78
Nekoosa Papers' new finishing line at Ashdown	Oct 82
Nekoosa Papers starts up Sym-Former at Ashdown	Apr 126
New system improves bleached-pulp cleaning at Tahsis	Mar 66
New testliner, medium machine uses 100% wastepaper (France)	Mar 66
Potlatch's new tissue machine adds 50,000 tpy capacity (Idaho)	Dec 88
Publishers Paper starts up deinking phase of Newberg expansion	Jul 158
Scott upgrades waste treatment facilities (Ala.)	Feb 98
Two Italian mills expand coater capacity	May 180
Westvaco's new satellite longwood chip mill at Andrews, S.C.	Jul 80

Finance/economics

Canadian fine paper losing tariff protection	Jan 106
Capital spending programs at U.S./Canadian mills	Jan 127
Chemical supply for Canadian pulp and paper industry	Oct 72
Chemical supply for U.S. pulp and paper industry	Oct 72
Corrugated box shipments down after four-year rise	Jul 129
Growth of aluminum-metalized papers predicted	Jan 108
Industry to begin slow recovery in 1981; more growth in 1982	Sep 160
Longwood trucking—equipment, regulations, economics	Jun 99
Newsprint supply/demand imbalance examined	Feb 175
No U.S. recession for coated grades	May 71
Outlook 1980—Cartoon review	Jan 82
Outlook 1980—Increasing costs, prices—decreasing profits	Jan 86
Outlook 1980—Industry execs discuss challenges of recession	Jan 72
Outlook 1980—Labor contracts fill calendar	Jan 84
Outlook 1980—Slow economy affects paper supply	Jan 76
Oxygen bleaching—economic analysis	Mar 92
Timberland investment critical to improving profitability	Nov 72
Trucking regulations affect transportation costs	Jun 79
Washington Viewpoint—Tax talk: a break from Congress?	Sep 43
World Review—difficult period expected in the '80s	Aug 64

Finishing/converting

Bale scales, moisture-measurement improve pulp moisture	Oct 178
Electronic sheet counter cuts losses as Beveridge	Oct 72
Evaluation of finishing department operations	Jun 188
How to's of winder operation—speed, automation	Jul 154
Improved handling in finishing department	Feb 104
Nekoosa Papers' new finishing line at Ashdown	Oct 72
Paper handling—proper loading, bracing methods for shipping	BG 44
Precision sheeting: How it meets printer requirements	Oct 158
Reducing defects in rolls at paper machine winder	Oct 102
Tales of a troubleshooter—supercalendering newsprint	Apr 124

Management

API reports industry nearing 1980 energy reduction target	Jun 134
API survey shows growth of various paper grades	Feb 155
Bark-pile fires can be controlled with proper storage	Dec 119
Canada's paper market share threatened by wood shortage	May 178
Canadian fine paper losing tariff protection	Jan 106
Canadian shipments up in 1979; outlook optimistic for '80	Apr 155
Capital spending programs at U.S./Canadian mills	Jan 127
Changing jobs: career consultant discusses reasons, options	Nov 170
Comment—Latin America's role in the industry	Apr 272
Comment—Meeting the challenges of the 1980s	Mar 220
Comment—Recycled board producers in crossfire	Jan 220
Construction contracts: criteria and alternatives	Sep 74
Corrugated box shipments decline after four-year rise	Jul 129
Corrugated box shipments to rise 3.0% in 1981	Dec 98
CPPA annual meeting focuses on sulfonation	Apr 152
Electronic publishing—its impact on paper industry	Oct 85
Environmental forum looks at waste regulations, superfund	Sep 134
Evaluation of productivity, operating costs of finishing	Jun 188
Good system design is best preventive maintenance	Mar 162
Grade profile—Bleached paperboard	Aug 39
Grade profile—Coated groundwood publication papers	May 31
Grade profile—Construction paper and board	Nov 37
Grade profile—Corrugating medium	Jun 39
Grade profile—Linerboard	Feb 37

Grade profile—Newsprint	Jan 37	Chemimechanical pulp—option for Canadian newsprint industry	Jun 70
Grade profile—Paper-grade chemical market pulp	Sep 41	ClO ₂ effective biocide in alkaline whitewater systems	Aug 140
Grade profile—Recycled boxboard	Jul 37	Closing whitewater system helps meet effluent standards	Mar 60
Grade profile—Tissue	Apr 39	Con-Bath first in Canada to use three twin-wire wet ends	Feb 70
Grade profile—Uncoated groundwood printing grades	Oct 41	Consolidated's new LWC paper machine at full production	Aug 93
Grade profile—Uncoated printing/writing	Mar 35	Couch press improves quality, runability of medium machine	Sep 107
Growth of aluminum-metalized papers seen	Jan 108	Diamond International's recycled boxboard mill starts up	Jul 74
Guide to EPA's new hazardous waste regulations	Aug 118	Dryer section changes reduce energy requirements	Jan 160
Hazardous waste regulations—impact on paper industry	Nov 144	Dry forming—history and technology	Apr 120
Industry consultant examines environmental legislation of '70s	Jul 104	Economic advantages found in air-drying board	Apr 177
Industry nearing EPA guidelines for air/water quality	Jan 135	European boardmakers stress pressing efficiency	Apr 99
Industry strength discussed at API Paper Week	May 120	Fine-tune consistency control system for best performance	Mar 134
Labor bargaining in 1980 reviewed at API/FBA conference	Apr 103	Fraser rebuild directed toward groundwood printing grades	Sep 102
Labor/Management—1980 bargaining	Feb 35	G-P's new tissue machine raises capacity 50% (N.Y.)	Oct 126
Labor/Management—Legislative 'iceberg' of the 1980s	Jun 37	Grade profile—Bleached paperboard	Aug 39
Labor/Management—Productivity No. 1 goal	Feb 35	Grade profile—Coated groundwood publication papers	May 31
Labor/Management—Scenario for tomorrow	Aug 37	Grade profile—Construction paper and board	Nov 37
Labor/Management—The productivity option	Apr 37	Grade profile—Corrugating medium	Jun 39
Labor/Management—Whatever happened to Horatio Alger?	Oct 39	Grade profile—Linerboard	Feb 37
Labor/Management—workforce 'discontinuity'	Dec 35	Grade profile—Newsprint	Jan 37
Longwood transpor calls for new equipment, regulations	Jun 99	Grade profile—Paper-grade chemical market pulp	Sep 41
Mill communications—a cartoonist's view	Mar 140	Grade profile—Recycled boxboard	Jul 37
Newsprint supply/demand imbalance examined	Feb 155	Grade profile—Tissue	Apr 39
No U.S. recession seen for coated printing/writing grades	May 71	Grade profile—Uncoated groundwood printing grades	Oct 41
Outlook 1980—Cartoon review	Jan 82	Grade profile—Uncoated printing/writing grades	Mar 35
Outlook 1980—Increasing costs, prices—decreasing profits	Jan 86	Great Northern rebuilds printing paper machine (Maine)	Oct 123
Outlook 1980—Industry execs discuss challenges of recession	Jan 72	Green Bay's decreased production saves energy, is profitable	Sep 164
Outlook 1980—Labor contracts fill calendar	Jan 84	Grooved rolls replace first press suction rolls	Jun 104
Outlook 1980—Slow economy affects paper supply	Jan 76	Growth of aluminum-metalized paper seen	Jan 108
Overseas demand competes for U.S. wastepaper supplies	Jul 70	Insulation of dryer heads is profitable for mill	Oct 184
Printing/writing paper sees increased demand, competition	Aug 121	K-C's fluff pulp expansion at Coosa Pines	Jun 128
Pulpwood harvests suffering due to spruce budworm	Jun 109	Largest newsprint mill on-line at Bowater Southern	Feb 73
Rail decontrol, rising costs of concern to industry	Aug 75	L-P installs unique Converflo headbox, improves sheet surface	Jun 82
Reduce losses from storage area fires	Mar 142	MB's Port Alberni modernization improves liner production	Sep 110
Regulations may deter chemical development, use	Mar 68	MB upgrades core manufacture at Powell River	Dec 58
Safety-awareness campaign can prevent warehouse accidents	Dec 118	Method for evaluating productivity, operating costs of finishing	Jun 188
Safety management techniques for supervisors	Sep 166	Midtec completes \$85-million expansion (Wis.)	Nov 94
Slow industry recovery anticipated in 1981, better in 1982	Sep 160	Modern presses reduce breaks at high speeds	Jul 77
TAPPI annual meeting on paper supply, raw materials	May 155	Multifourdriener produces high-quality, specialty papers	Feb 78
TAPPI coating conference covers computer control, pigments	Jul 160	Multi-ply board production costs lower using control system	Feb 101
TAPPI engineering conference focuses on design, energy	Nov 124	New screen improves chip quality at Fiskeby AB	Jun 73
TAPPI finishing conference focuses on sheeting	Dec 140	New Sym-Former fine paper machine at Nekoosa	Apr 126
TAPPI papermakers look at energy reduction, additives	Jun 163	New technique controls cross machine moisture profiles	Apr 174
Timberland investment critical to improving profitability	Nov 72	100% TMP newsprint mill starts up (Va.)	Apr 65
Trucking regulations confuse wood transportation outlook	Jun 79	Optical flow transmitter offers advantages over magnetic	May 69
Washington Viewpoint—A cartoonist's view	Mar 37	Papermakers' sign language—a cartoonist's review	Mar 140
Washington Viewpoint—Gutting regulatory reform	Nov 39	Potlatch brings new tissue machine on-line at Lewiston	Dec 88
Washington Viewpoint—Parading regulatory reform	Feb 39	Progress of pressurized grinding	Jun 76
Washington Viewpoint—Windfall energy savings	May 33	Proper use of defoamers yields cost-effective foam control	Mar 116
Worker safety—how to select a breathing-air system	BG 53	Single-felting in dryers increases production at BCFP	Apr 96
World naval stores production is up; fails to meet demand	Dec 114	Spectrophotometer helps maintain color on-line	May 66
World Review—A look at China's paper industry	Aug 88	Steam box increases sheet temperature, improves drainage	May 158
World Review—Australian industry growth prospects	Aug 112	Strobe lights help solve formation problems	May 186
World Review—Difficult period expected in the '80s	Aug 64	Supercalenders—design/operation developments	May 126
World Review—New Zealand industry strong	Aug 115	Testliner machine uses 100% wastepaper at French mill	Mar 66
		Total performance analysis of board, medium machines	Oct 129
		Trouble-free operation of doctors—Part 1	Apr 146
		Trouble-free operation of doctors—Part 2	May 188
		Troubleshooting—A look at supercalender problems	Apr 124
		Troubleshooting—Preventing paper machine problems	May 90
		Troubleshooting—Supercalendering guidelines	Jul 164
		Winder selection simplified, better results seen	Jul 154
		World Review—A look at China's paper industry	Aug 88
Meetings/conferences		Process control	
API/FBA conference looks at labor bargaining in 1980	Apr 103	Accurate moisture measurement of frozen chips	Jun 136
API/NFPA environmental conference looks at regulations	Sep 134	Coater control systems must be flexible, efficient	May 100
API Paper Week discussions center on strength of industry	May 120	Computer control cuts energy costs at Union Camp	Feb 123
Canada's paper market share vs wood shortage	May 178	Computer control reduces energy usage in dryer section	May 93
CPPA annual technical meeting covers broad range of subjects	Apr 152	Fault-detection system improves coating quality	Feb 148
CPPA expresses optimism for 1980	Apr 155	Fine-tune consistency control for maximum performance	Mar 134
FBA meeting told corrugated box shipments to rise in 1981	Dec 98	High-intensity strobe lights help solve formation problems	May 186
Financial Analysts seminar predicts paper recovery in 1981	Sep 160	ITT Rayonier's computer study raises digester capacity	Jun 106
Naval stores meeting—production, CTO fractionation	Dec 114	Low energy consumption in Scandinavia can be lesson to U.S.	May 150
TAPPI annual looks at supply, raw materials, conservation	May 155	Microelectronics offer practical applications	Feb 151
TAPPI coating conference covers computer control, pigments	Jul 160	New technique to control cross-machine moisture profiles	Apr 174
TAPPI engineering conference focuses on design and energy	Nov 124	Optical flow transmitter improves process control	May 69
TAPPI engineering focuses on energy, design economics	Jan 152	Process control system cuts multi-ply production costs	Feb 101
TAPPI environmental conference focuses on mill compliance	Jul 183	Refiners use in-line transmitter for freeness control	Feb 128
TAPPI finishing conference focuses on sheeting	Dec 140	Refractometer measures green liquor density	Feb 80
TAPPI papermakers discuss energy reduction, additives	Jun 163		
Papermaking/boardmaking			
Air systems are source of energy savings	Apr 74		
Centrifugal vacuum systems can reduce energy, water use	Dec 142		
CFI ups board output by 75 tpd	Jan 102		
Champion's new fine paper machine starts up at Courtland	Jul 94		

Pulp processing

Accurate moisture measurement of frozen chips	Jun 136
Alcohol pulping feasible on small scale	Aug 144
Bale scales, moisture measurement improve pulp moisture	Oct 178
Bin activator increases flow from chip storage silo at MB	Jun 162
Bleached-pulp cleaning improvement program at Tahsis	Mar 96
Bleaching of TMP improved with metal chelants	Oct 108
Calcasieu tests residual alkali; improves recovery operations	Jun 191
Chemimechanical pulp in the Canadian newsprint industry	Jun 70
ClO ₂ mixer improves pulp quality at BCFP Crofton	Mar 119
Coal-oil-water as lime kiln fuel	Aug 134
Combination chemical recovery maximizes pulping flexibility	Nov 119
Cost-effective makeup chemicals in kraft recovery	Mar 160
CTO value increases pulp recovery efforts	Feb 130
Flash dryers boost lime kiln production, save fuel	Feb 178
Fluff pulp—development and technology	Mar 110
How to optimize TMP peroxide bleaching	Nov 127
Improved screening methods improve pulp yield, save energy	Nov 68
Low-cost bleaching—Compact Bleaching operational in Brazil	May 98
Low-cost bleaching—new design for mild climates	May 96
Maximum performance from consistency control system	Mar 134
Methanol recovery offers energy savings	Apr 171
Mill modifies bleaching sequence to handle chlorine shortage	Nov 100
Obtaining high causticizing efficiency, lower steam usage	Nov 174
Optimum refining with less energy—principles and design	Mar 165
Oxygen bleaching—economic analysis	Mar 92
Oxygen bleaching—research, advantages discussed	Mar 87
Peroxide use in bleaching increases	Jan 156
Progress of pressurized grinding	Jun 76
Pulp mill part of completed expansion at Champion mill	Jul 94
Self-cleaning centrifuge aids CTO separation efficiency	Nov 147
Sulfite pulping: Review of its history, technology	Nov 74
TMP brightness improved by hydrogen peroxide bleaching	Jun 156
Two-stage batch digester steaming cuts energy consumption	Dec 68
Unique pulp-drying process in use in Sweden	Jan 186
Westvaco starts up longwood chip mill (S.C.)	Jul 80

Raw materials/pulpwood/forestry

Bin activator ends flow problems in chip silo	Jun 162
Canada's wood supply running low	May 178
Comment—Tenure in shrinking timberlands	May 258
Longwood trucking—new equipment and regulations examined	Jun 99
New screen improves chip quality at Fiskeby AB	Jun 73
Noise-abatement program improves woodyard conditions	Sep 198
Spruce budworm lowers pulpwood harvests	Jun 109
Trucking regulations for wood transportation	Jun 79
Washington Viewpoint—Timber: A supply-side problem	Jun 41
Westvaco satellite longwood chip mill goes on-line	Jul 80
Westvaco studies chip density factors for accurate inventory	Sep 137

Recycling

Diamond International boxboard mill uses recycled fiber (Ohio)	Jul 74
French facility uses 100% wastepaper	Mar 66
Low-temperature dispersion system cuts steam energy use	Jul 186
Newsprint recycling collection success dependent on public	Jul 100
Publishers Paper starts up deinking phase of Newberg expansion	Jul 158
Refiner packing life extended through use of synthetic seals	Jul 188
Wastepaper exports increase during '70s	Jul 70
Wastewater surcharges saved with high-efficiency strainer	Mar 139

Research/testing

Alcohol pulping favors small-scale operation	Aug 144
Chemimechanical pulp—option for newsprint industry	Jun 70
Coal-oil-water mixture tested as lime kiln fuel at St. Regis	Aug 137
Dry forming: history and technology	Apr 120
Evaporator scaling at IPC/Westvaco	Mar 156
Fluff pulp: development and current technology	Mar 110
How to optimize TMP peroxide bleaching	Nov 127
Hydrogen peroxide bleaching for high-brightness TMP	Jun 156
Increased alkali residual can improve recovery operations	Jun 191
Measuring frozen chip moisture	Jun 136
Metal chelants improve bleaching of TMP	Oct 108
Mill-designed ClO ₂ mixer improves pulp quality	Mar 119
Oxygen bleaching—research, advantages	Mar 87
Progress of pressurized groundwood process	Jun 76
Review of TRS and SO ₂ emissions, current technology	Jul 124
Studies of chip density provide more accurate inventory at Westvaco (S.C.)	Sep 137
Study of digesters raises capacity at ITT Rayonier	Jun 106
Sulfite pulping: Review of its history and technology	Nov 74
Supercalenders—new developments in design, operation	May 126

Statistics/listings/directories

Adhesives/binders—listing of those currently in use	BG 32
Chemical supply for Canadian pulp and paper industry	Oct 77
Chemical supply for U.S. pulp and paper industry	Oct 72
Chemicals used in pulp and paper industry—suppliers	BG 165
Equipment and supplies directory	BG 81
Manufacturers and suppliers directory	BG 291
Market pulp grades, producers, tradenames	BG 209
New products, literature—review of most popular items	BG 55
New products, literature—showcase of new products, services	BG 16
Technical and consulting services directory	BG 191
Tradename directory for machinery and chemicals	BG 233
World Review—difficult period expected in the '80s	Aug 64

Index by Company

A			
Abitibi-Price Inc.		New newsprint machine (Ont.)	Apr 13
Capital spending program		Completes Kenogami project	May 13
may include news machines	Jan 15	Closes Blountstown plant	Jun 23
MB acquires Sturgeon Falls mill	Jan 19	Chosen as CPU target	Jul 21
Energy conservation measures	Feb 23	Reaches labor agreement with CPU	Sep 15
Conner plants sold to MB	Feb 27	Stephenville startup delayed (Nfld.)	Sep 21
Joins newsprint price increase	Mar 11	Barker redesign/rebuild (Mich.)	Sep 188
		To raise roto-news prices	Oct 11
		To raise pulp capacity (N.B.)	Apr 19
		To expand siding plant (N.C.)	May 27
		CPU talks break down	Jun 19
		Responsible for reforestation	Jun 27
		Five-year modernization program	Jul 19
		Announces new newsprint prices	Nov 11
		Makes "pattern" offer to union (Que.)	Nov 23
		Converts solids waste into fuel	Nov 105
		CNTU again rejects contract offer	Dec 21

Alabama River Pulp Co. Claborn mill nears full production May expand pulp mill (Ala.)	Feb 21 Sep 21	Announces new liner prices Ratifies contracts at two mills (Ont.)	Nov 11 Nov 23	Bids on chip supplies	Apr 29
Alaska Lumber & Pulp Tests alloys for pipe replacement	Dec 135	Boise Southern Paper Corp. Starts up newsprint machine (La.) Mill settles for 8% first year (La.)	Aug 17 Sep 15	Celotex Corp. Gypsum antitrust case settled Fiberboard sheeting market down Synthetic seals extend packing life	Apr 21 Jun 23 Jul 188
Albion Pulp & Paper Press rebuild improves production	Sep 110	Bowater Inc. Joins newsprint price increase Acquires Camvac Holdings Ltd. Announces new newsprint prices	Mar 11 Apr 33 Nov 11	Champion International Corp. Starts up machine at Courtland To build timber processing plant (S.C.) Postpones proposed Quinnesec mill Volcano causes mill downtime (Mont.) Courtland expansion complete Workers strike Courtland Workers reject 8% offer (Texas) Reaches labor settlement at Courtland Announces new liner prices Workers ratify contract (Ala.) Loses over 10,000 acres of seedlings Approves \$650-million projects Acquires Gulf States sawmill	Apr 15 May 27 Jun 21 Jul 17 Jul 94 Aug 13 Sep 15 Oct 21 Nov 11 Nov 23 Nov 33 Dec 15 Dec 31
Allied Paper Inc. Mills shut by strike (Mich.)	Jul 21	Bowater Southern Paper Corp. Calhoun expansion complete Mill settles for 8% first year (Tenn.)	Feb 73 Sep 15	Chase Bag Co. To settle price-fixing suit	Jun 23
Alton Box Board Co. Sells plant to Mead (Ill.) Corrosion in heat exchanger (Fla.) Smurfit to raise stake in Alton Smurfit buys 29.6% more shares	Sep 37 Sep 200 Nov 19 Dec 19	Boxcraft Ltd. Negotiating to buy ITT Rayonier mill	Nov 21	Chesapeake Corp. of Virginia To spend \$51 million for upgrade Acquires Chesapeake Bay Plywood	Apr 27 Oct 33
American Bag & Paper Corp. Civil antitrust suit settled	Jan 25	Brascan Ltd. Increase in Noranda Mines holdings sought	Jan 17	Churchill Forest Industries Civil suit settled	Feb 23
American Can Co. Increases tissue prices Increases tissue prices Reaches agreement with union Market-testing dry-formed towels	Mar 11 Jun 11 Jun 19 Aug 31	British Columbia Forest Products Ltd. Plan for newsprint mill approved To rebate excess profits Plans new facilities at Hammond, B.C. Buys additional 5% in Donohue St-Felicien	Jan 13 Feb 23 Feb 27 Mar 17	Cleopak Corp. Consolidates Syracuse carton plant Begins production at new plant (Pa.)	Mar 31 Sep 37
Amricon Corp. Is new name of Riverside Paper	Oct 23	Bidding on Elk River Timber Mill-designed CIO ₂ mixer To buy Elk River Timber Single felting in dryer section Finds new wood source Alberta government signs mill pact To be part owner of Rayonier Canada	Mar 17 Mar 119 Apr 33 Apr 96 Jun 27 Sep 19 Oct 13	Consolidated-Bathurst Inc. Hikes newsprint prices Buys interest in natural gas firm Port Alfred expansion complete To update Wayagamack Div. Ups newsprint capacity (Que.) CPU wants mill upgraded (N.B.) Completes oil/gas firm purchase Orders new type wet end (Que.) Raises roto-news prices Reaches settlement with CNTU Announces new newsprint prices CNTU return to work (Que.)	Feb 11 Feb 25 Feb 70 Mar 19 Apr 15 Aug 19 Sep 17 Sep 33 Oct 11 Oct 19 Nov 11 Nov 23
APL Corp. To be acquired by NVF	Mar 15	Brown Co. James River lowers net price Backs out of James River deal New deal with James River Selling two tissue mills To be acquired by James River Signs merger with James River Merger with James River, G + W near	Jan 19 Feb 13 Mar 15 Mar 15 Jul 25 Oct 15 Dec 19	Consolidated Papers Inc. Given discharge limit extension (Wis.) Paper machine troubleshooting (Wis.) New kraft recovery furnace (Wis.) Is world's largest LWC producer	Jan 33 May 90 Jul 82 Aug 93
Appleton Papers Strike settled at Wellsburg mill Mill signs contract with UPIU (Wis.) Land-application program (Pa.)	Mar 23 Oct 21 Nov 151	Brunswick Pulp & Paper Co. Solves effluent pumping problems	Jul 189	Container Corp. of America Relocates corrugated container plant Strike settled at 20 plants Orders new boiler for mill (Ala.)	Jan 33 Aug 13 Oct 23
B		C		Continental Forest Industries Upgrades Port Wentworth mill To build chip mill (Ga.) Coating protects felt rolls (La.)	Jan 102 May 27 Dec 63
B.A.T. Industries Ltd. Antitrust charge filed	Jul 25	Calcasieu Paper Co. Improves recovery operations	Jun 191	Continental Group Inc. Civil antitrust suit settled To spend \$64 million at Hodge, La. Hopewell project nears completion	Jan 25 Nov 13 Nov 13
Bear Island Paper Co. New TMP newsprint mill on-line	Apr 65	Canadian Cellulose Co. Raises market pulp prices To purchase P. de-Skeena Plans bleached kraft expansion (B.C.) To expand pulp mill (B.C.) Agrees to buy supplier sawmill	Jan 11 Feb 27 Jun 13 Oct 25 Nov 31	Continental Group of Canada MB to buy container plants MB acquires container plants	Feb 27 Mar 17
Beaver Wood Fibre Co. Ltd. CPU shuts down line mill (Ont.)	Dec 21	Canadian Forest Products Ltd. Announces new newsprint prices Bids on chip supplies Buys P&W pulp mill (Sask.) Withdraws from Crows Nest deal	Nov 11 Apr 29 Nov 19 Dec 31	Crestbrook Forest Industries Ltd. Has pulpwood supply study done	Mar 21
Beckett Paper Co. Strike at Hamilton continues (Ohio) Strike settled at Hamilton (Ohio)	Jun 19 Aug 13	Canadian International Paper Building carton plant in Calgary Announces expansion program (N.B.) To sell 33% of Dalhousie mill Receives environmental award To raise roto-news prices Starts up rebuilt machine (Que.)	Feb 27 May 13 Aug 25 Aug 33 Oct 11 Oct 17	Crown Zellerbach Canada Sells Elk River assets to BCFP Announces new newsprint prices	Apr 33 Nov 11
Bemis Co. Approves new plant (Wis.) To sell interest in Bonar & Bemis Ltd.	Sep 37 Sep 37	Cariboo Pulp & Paper Co. Ltd. May expand capacity at Quesnel Applies for B.C. timber	Jan 15 Feb 21		
Bendix Corp. To sell California timberland	Nov 33				
Beveridge Paper Co. Electronic sheet counter cuts losses	Oct 107				
Bird & Sons Inc. May close board mill (Mass.)	Nov 15				
Boise Cascade Corp. To sell pulp in Japan To make copier paper (Minn.) Indians near suit settlement Making white paper at Wallula Joint Northwest bargaining planned Reconsiders capital spending Volcano causes mill downtime Workers strike Rumford Intends to buy Brown timberland Strikers demand 9% hike (Maine) Ratifies 3-year contract (Maine)	Feb 25 Apr 17 May 19 Jun 15 Jun 19 Jun 21 Jul 17 Aug 13 Sep 15 Sep 15 Oct 19				

Crown Zellerbach Corp.
 Plan for doubling business paper output Jan 15
 Strike settled at Ohio mill Jan 19
 Strike settled at St. Francisville Feb 19
 Looks at low-cost alcohol from cellulose Feb 29
 Five-year agreement with UPIU Jun 19
 Joint Northwest bargaining planned Jun 19
 Volcano causes mill downtime Jul 17
 Begins Camas expansion studies Aug 15
 Closes Lebanon, Ore., mill Sep 23
 Starts up 1300-tpd digester (La.) Oct 15
 To permanently close Antioch mill Oct 19
 Predicts sharp earnings drop Nov 17
 Settles antitrust suit Nov 21
 Mechanical problems tighten liner market Dec 11
 Recovery boiler fire (La.) Dec 19
 Settles EPA effluent suit Dec 23

D

Deerfield Specialty Papers Inc.
 Plea entered in price-fix case May 19
 Signs contract with UPIU (Mass.) Oct 19

Diamond International Corp.
 Agrees to Brooks-Scanlon merger Feb 15
 Starts up "new" mill (Ohio) Apr 19
 To close boxboard mill (Ohio) May 15
 Indians near suit settlement (Maine) May 19
 Signs Brooks-Scanlon merger May 27
 Cavenham unit begins tender offer Jun 23
 Will sell up to 40% to Cavenham Jul 25
 Plans upgrade at Lockland, Ohio Aug 17
 Beats takeover attempt Aug 23
 Workers ratify contract (Maine) Nov 23
 Indians to purchase land (Maine) Nov 33

Doman Industries Ltd.
 Plans TMP mill at Duke Point, B.C. Mar 19
 To buy part of Rayonier Canada Oct 13

Domtar Inc.
 Sonoco buys into can division Jan 33
 To buy interest in Agnew Lake Mines Feb 15
 To upgrade three Ontario mills Feb 19
 Acquires vessel for gypsum transport Mar 31
 Mill goes to 100% RMP (Que.) Jun 15
 Referendum defeated (Que.) Jul 23
 To buy two container plants Sep 37
 CNTU ratifies contract (Que.) Nov 23
 CPU shuts down three mills Dec 21

Donohue Inc.
 Federal approval of mill near (Que.) Jun 15
 Newsprint mill gets grant (Que.) Aug 19
 Work to continue at Amos Sep 19
 To install winder at Clermont Sep 19

Donohue St-Felicien
 BCFP ups ownership to 45% Mar 17

E

E.B. Eddy Forest Products Ltd.
 Plans \$225-million program Jan 15
 Labor contract ratified (Ont.) Nov 23

Ecusta Paper Co.
 Biocide for alkaline whitewater Aug 140

Eurocan Pulp & Paper Co.
 Fire shuts down Kitimat mill Jan 17
 Precipitator back in service (B.C.) Apr 19

F

Federal Paper Board Co.
 Reliance Group buys interest Mar 17

To sell two mills (Md., Pa.) Aug 23

Finch, Pruyn & Co.
 Boosts mill's capacity 7% (N.Y.) Oct 17
 Bark-drying system cuts fuel use Dec 96

Finlay Forest Industries Ltd.
 To begin expansion (B.C.) Jun 13
 Back to five-day weeks Sep 37

Flambeau Paper Corp.
 May install power boiler (Wis.) Jun 31

Flintkote Co.
 Genstar begins cash tender Jan 17
 Genstar owns 94% of stock Feb 15
 Is wholly owned by Genstar Mar 17

Flower City Tissue Mills
 Uses ceramic coating on components Jul 163

Fort Howard Paper Co.
 Dry-formed wipe on market Jan 27
 Increases tissue prices Mar 11
 Sues Kimberly-Clark Apr 21

Fox River Paper Co.
 Strainer reduces sewer surcharges Mar 139
 Completes machine rebuild (Wis.) Dec 15

Franconia Paper Co. Inc.
 Goes out of business Nov 15
 Mill equipment auctioned Dec 19

Fraser Inc.
 Completes rebuild at Madawaska Mar 19
 To upgrade boxboard mill (N.B.) Apr 19
 May convert pulping process (N.B.) May 15
 Completes expansion (Maine) Jun 15
 Expands printing paper capacity Sep 102

G

Garden State Paper Co.
 Five year settlement at Pomona Jul 21

Gaspesia Pulp & Paper Co.
 Wood supply shortage closes mill (Que.) Oct 19

Genstar Co.
 Begins tender offer for Flintkote Jan 17
 Owns 94% stock in Flintkote Feb 15
 Acquires Flintkote Mar 17

Georgia-Kraft Co.
 Starts up new liner machine (Ga.) Oct 17
 Workers ratify contracts (Ga.) Nov 23

Georgia-Pacific Corp.
 Ends negotiations with Kinzua Feb 15
 Acquires Texas-based oil company Feb 25
 Labor talks shut down four plants Feb 27
 Withdraws hydropyrolysis proposal Feb 29
 Approves \$200 million at three mills Mar 17
 Closes Thomson tissue mill Mar 19
 Starts up felt/roofing complex Mar 31
 Rebuilds uncoated machine (Mich.) Apr 17
 Gypsum antitrust case settled Apr 21
 Cuts spending plans for 1980 May 17
 Joint Northwest bargaining planned Jun 19
 Union strikes in Kalamazoo Jul 21
 Calls back shifts at sawmills Jul 33
 New secondary treatment system Jul 180
 Workers strike Kalamazoo Aug 13
 Seeks quick antitrust settlement Aug 31
 Pays pollution deadline fine (Wash.) Aug 33
 Strike settled at 8.5% offer (Mich.) Sep 15

Rebuilt machine starts up (Mich.) Sep 23
 Excused from civil suit Sep 25
 Reaches labor agreement at Palatka Oct 21
 To build computerized pine sawmill Oct 33
 New tissue machine ups capacity 50% (N.Y.) Oct 126
 Attacks Conrail joint rate move Nov 25
 To phase out bag, sack operations (Ark.) Nov 33
 Seedling mortality rate is 50% or more Nov 33
 Signs R&D agreement with ErWePa Dec 27

P.H. Glatfelter Co.
 Plans machine rebuild (Ohio) Jun 15
 Wins API/NFPA award Aug 33
 Reaches labor agreement at Neenah Oct 21

Great Lakes Forest Products Ltd.
 Acquires Reed Dryden operations Feb 15
 Joins newsprint price increase Mar 11
 To upgrade Thunder Bay Jun 29
 Closed-cycle problems persist (Ont.) Jul 29
 To replace three machines with new one Nov 13

Great Northern Nekoosa
 Ashdown startup on schedule Feb 19
 Sells stock in coal-mining subsidiary Mar 17
 Details expansion options Sep 25
 Offers to acquire Whippany Paper Oct 13
 Reaches labor settlements at mills Oct 19
 Bid to buy Whippany falters Nov 19
 Announces settlement in antitrust suit Nov 21
 Indians to purchase land (Maine) Nov 33

Great Northern Paper Co.
 Indians near suit settlement (Maine) May 19
 Starts up rebuilt machine (Maine) Aug 17
 Machine rebuild doubles capacity Oct 123

Great Southern Paper Co.
 Woodyard noise-abatement program Sep 198

Green Bay Packaging Inc.
 Baghouse concept allows coal use flexibility Feb 107
 Examines small tonnage increases Sep 164
 Engineering on new machine continues Nov 13

Groveton Papers
 Installs new couch press (N.H.) Sep 107

Gulf States Paper Corp.
 To install pulp-drying system (Ala.) Sep 21

Gulf + Western Industries Inc.
 Merger with Brown/James River near Dec 19

H

Hammermill Paper Co.
 Acquires Mellocraft Jan 19
 To purchase Ropak Feb 15
 Sues to stop investor Icahn May 19
 Takes vote on Icahn issue Jun 23
 Annual meeting adjourned until June Jul 25
 Icahn vote count still pending Aug 25
 Defeats Icahn in proxy battle Sep 17
 To buy Associated Forest Resources (Va.) Sep 37
 Settles antitrust suit Nov 21
 Buys two sawmills (S.C.) Dec 31

Harley Corp.
 Settles civil antitrust suit Jan 25

I

Imperial Paper Co. Installs insulation caps on dryers	Oct 184	Kraft pulp below capacity (Ont.) Raises tissue prices	May 15 Jun 11	Pulp digester top blown off (Ala.) Mechanical problems tighten board market	Nov 15 Dec 11
Inland Container Corp. Acquires two box plants	Jan 33	Defers plans for tissue mill (Ga.) Completes Coosa Pines expansion	Jun 21 Jun 128	Shuts mill down 10 weeks (Ala.) Increases core-manufacturing capacity	Dec 19 Dec 58
Process control improved (Ind.) To build box plant (Kans.)	May 69 Nov 31	Test markets first air-laid tissue Completes tissue rebuild (Conn.)	Jul 23 Jul 23	Madison Paper Corp. To install new paper machine (Maine)	Apr 17
Intercontinental Pulp Co. Ltd. Wood shortage halts B.C. project	Feb 21	Hit by temporary injunction Settles antitrust suit	Oct 25 Nov 21	UPIU alters decision on IAM picket line	Dec 21
International Paper Co. Strike settled in Texarkana	Feb 19	Machinists walk off job (Ala.) Mill returns to operation (Ala.)	Nov 23 Dec 21	Manitoba Forestry Resources Ltd. Strike ends at The Pas; mill reopens	Mar 23 Jul 33
Capital spending to exceed \$900 million Withdraws hydropyrolysis proposal	Feb 21 Feb 29	Kimberly-Clark of Canada Ltd. To upgrade converting plants	Mar 31	Masonite Corp. Siding operations at 50% capacity	Jun 23
Shows interest in low-cost alcohol from cellulose	Feb 29	Kruger Inc. Buys Hercules Div. of Dorfin	Feb 27	Mead Corp. Approves Escanaba project (Mich.)	Jun 13
Kenaf passes press-run tests Labor changes agreed to (Ala.)	Mar 29 Apr 23	Fault-detection system at Three Rivers mill To build joint newsprint mill (Miss.)	Feb 148 Jul 19	Reviews spending programs Buys Alton Box Board plant (Ill.)	Aug 21 Sep 37
To mine lignite in Arkansas Picks site for lumber mill (Miss.)	Apr 27 Apr 33	Kruger Pulp & Paper Ltd. Labor contracts ratified (Que.)	Nov 23	Starts up Lynchburg machine (Va.) Found guilty in corrugated case	Nov 13 Nov 21
Completes Gardiner rebuild (Ore.) Indians near suit settlement (Me.)	May 15 May 19	L		Settles antitrust suite Right-of-contribution case thrown out	Nov 21 Dec 23
Area measure for newsprint sales Unique effluent treatment (La.)	May 23 May 23	Lincoln Pulp & Paper Indians to purchase land	Nov 33	Menasha Corp. Closes whitewater system	Mar 60
Buyers site for wood facility (La.) To close folding carton plant (Md.)	May 27 Jun 19	Little Rapids Corp. Purchases converting operation	Feb 15	Shuts mill to work off inventory Plants form Fibre Products Group	Jul 15 Sep 37
Joint northwest bargaining planned To install nonwoven machine	Aug 17	Lockport Paperboard Co. Files Chapter 11, closes mill	Oct 19	Permanently closes container plant (Ind.) Weyco to acquire several operations	Oct 33 Nov 19
Wins API/NFPA award To sell medical subsidiaries	Aug 33 Sep 17	Longview Fibre Co. Shuts down mill to maintain inventory	Jun 27 Jul 17	Midtec Paper Corp. New coated paper machine to start up	Feb 21 Jul 29
To expand in uncoated white paper Acquires lumber mill (N.H.)	Sep 23 Sep 37	Loroco Industries Inc. Sonoco enters lease agreement	Apr 21	To reuse clay from sludge Starts up new LWC machine (Wis.)	Sep 23
Announces new liner prices Acquires hardwood mill (Miss.)	Nov 11 Nov 31	Louisiana-Pacific Corp. Waives rights against		Monarch Paper Corp. Acquisition sought by Wausau	Jan 17
To buy Brown acreage (Maine) Indians to purchase land (Maine)	Nov 33 Nov 33	Flintkote/Genstar Sonoco buys Sumner (Wash.) mill	Jan 17 Apr 21	Is acquired by Wausau	Feb 13
Completes Jay machine conversion	Dec 15	Joint Northwest bargaining planned Unique headbox arrangement improves sheet	Jun 19 Jun 82	Mosinee Paper Corp. Plans \$6-million rebuild (Wis.)	Oct 17
Interstate Folding Box Co. Settles strike at board mill (Ohio)	Oct 21	Calls shifts back at sawmills Buys timberland on coast (Calif.)	Jul 33 Aug 29	N	
Irving Pulp & Paper Ltd. Reaches agreement with CPU	Jun 19	Starts up new sawmill (Mont.) To close particleboard plant	Sep 37 Oct 33	National Gypsum Co. Agrees to sale of cement division	Feb 15
ITT Rayonier Port Cartier pulpwood for sale	Feb 23	To build waferboard plant (Maine)	Nov 31	Gypsum antitrust case settled Low-temp dispersion system (Ala.)	Apr 21 Jul 186
Licenses two European rayon producers World's largest boiler	Feb 25 Apr 27	Lydall Inc. To close shoeboard mill (Maine)	Aug 19	Nekoosa Papers Inc. Improves boiler efficiency (Wis.)	Apr 72
Joint Northwest bargaining planned Digester study raises capacity (Fla.)	Jun 19 Jun 106	M		Completes Ashdown expansion (Ark.) Plover Papers mill goes on strike	Apr 126 Oct 21
Settlement reached at Fernandina Cinders increase boiler efficiency	Jul 21 Aug 143	Maclaren Power & Paper Co. Noranda to buy outstanding shares	Feb 13	New finishing line at Ashdown mill Strike ends at Whiting mill (Wis.)	Oct 83 Dec 21
Boxcraft negotiates purchase of mill Port Cartier studies cancelled	Nov 21 Dec 17	MacMillan Bloedel Ltd. Abitibi-Price acquisition complete	Jan 19	Nicolet Inc. Shuts down last paper mill (Pa.)	Oct 19
J		To buy Continental Group container plants	Feb 27	Nitec Paper Corp. To expand Niagara Falls (N.Y.) mill	Apr 17
James River Corp. Lowers Brown net price	Jan 19	Acquires Continental container plants Bids on Elk River Timber	Mar 17 Mar 17	Noranda Mines Ltd. Brascan seeks additional shares	Jan 17
Brown deal falls through New deal with Brown	Feb 13 Mar 15	B.C. Resources to buy 14% of MB Sells container plant (Ohio)	Apr 19 Apr 33	Makes bid for Maclaren Acquires control of Maclaren	Feb 13 Mar 15
Revises Brown deal Suits filed against Riegel Div.	May 17 May 19	Special heaters speed starch cooking To add fine paper machine (B.C.)	Apr 150 May 15	Northwood Pulp & Timber Ltd. Expansion project to continue	Feb 21 Apr 29
To acquire Brown Co. Riegel unit settles suits	Jul 25 Sep 25	Details \$1.5 billion program Plywood plant to continue (B.C.)	May 17 May 27	Bids on chip supply To acquire North Central Plywood	Apr 33 Apr 33
Signs merger agreement with Brown IP agrees to buy Brown acreage	Oct 15 Nov 33	Bin activator ends flow problems Energy saving project underway (B.C.)	Jun 162 Jul 19	Establishes industrial forest nursery	Nov 33
Merger with James River/G + W near	Dec 19	To close Toronto container plant Orders medium machine for Pine Hill, Ala.	Oct 33 Nov 13	Nova Scotia Forest Industries Ltd.	
K					
Keyes Molded Container Group Doubles molded pulp capacity (Wash.)	Aug 19				
Kimberly-Clark Corp. Increases tissue prices	Mar 11				
Modernizes thin papers mill (N.J.) To rebuild Neenah machine (Wis.)	Mar 25 Apr 17				

Feedwater polishing system Jun 182
Plans new woodwaste boiler (N.S.) Sep 31

NVF Corp.
To acquire APL Corp. Mar 15
Three mills strike Jun 19
Reaches labor agreement Jul 21

O

Ocean Falls Corp.
Water shortage halves production Jan 17
To close newsprint mill (B.C.) Apr 15

Olin Corp.
Ecusta Group plans modernization Mar 25

Olinkraft
Becomes Manville Forest Products Sep 37
Uses welded-steel kiln drag chain Dec 139

Ontario Paper Co.
Develops Opcmo TMP process Mar 29
Begins revamp of Thorold mill Apr 13
Collects wastepaper for mill (Ont.) Sep 21

Owens-Illinois Inc.
In-line freeness transmitter in use at Valdosta Feb 128
Starts up corrugated plant (Calif.) Apr 33

P

Packaging Corp. of America
Bids for joint settlements Aug 31

Parsons & Whittemore Inc.
Hammermill settles out-of-court Aug 33
May sell two Canadian mills Sep 21
Waste recovery plant problems (N.Y.) Sep 21
Sells pulp mill to CFP (Sask.) Nov 19

Penntech Papers Inc.
Workers strike Johnsonburg (Pa.) Aug 13
Settles strike at Johnsonburg Oct 19

Philip Morris Industrial Paper Group
Indicted in price fixing Apr 21
Class-action suits filed May 19

Plainwell Paper Co.
Plans machine rebuild (Mich.) Feb 21

Pope & Talbot Inc.
Expands sawmill production Feb 27
To buy two Brown mills (Wis.) Mar 15
Buys Brown tissue mills Jun 23
Approves expansion at Eau Claire Oct 17

Port Huron Paper Co.
Acquires Scott mill (Mich.) Apr 21
Signs labor agreement Jul 21

Portals Ltd.
Plans security paper mill (Ga.) Nov 13

Potlatch Corp.
Raises market pulp prices Jan 11
Wood shortage halts B.C. project Feb 21
To close Orange (Calif.) mill Apr 15
Strike ends at Ransom mill (Pa.) Jun 19
Delays two energy projects Jun 21
Volcano causes mill downtime Jul 17
Tissue machine on-line (Idaho) Jul 19
Calls back shifts at sawmills Jul 33
Awarded DOE grant Sep 31
Signs labor contract at McGehee Oct 21
Murphy Oil buys 5.1% Dec 19
New tissue machine on-line (Idaho) Dec 88

Prince Albert Pulp Co. Ltd.
Employees told mill may be sold Sep 21
Plans new panel facility (Minn.) Oct 33

Procter & Gamble Cellulose Ltd.
Opens its first sawmill in Alta. Nov 31

Procter & Gamble Paper Products Co.
Increases tissue prices Mar 11
Adds fourth tissue machine (Ga.) Apr 15
Raises tissue prices Jun 11
Expands U.S. tissue distribution Jul 23
Reaches labor settlement (Mich.) Oct 21
Hit with product liability suit Oct 29
Suspends Rely tampon sales Nov 21

Publishers Paper Co.
Deinking phase at Newberg starts up Jul 158
Strike settled at Oregon mills Aug 13
Freshwater consumption study (Ore.) Sep 140
Replaces screened sulfite pulp tank Oct 106

Q

Quebec Public Works Ministry
Plans fiberboard mill Dec 15

Quesnel River Pulp Co.
Applies for B.C. timber Feb 21
Bids on chip supply Apr 29
Begins TMP mill construction (B.C.) Jun 13
To buy steam for mill (Ore.) Dec 25

R

Rayonier Canada Ltd.
Boiler explosion at Woodfibre (B.C.) Jul 19
To be acquired by three firms Oct 13

Reed Paper Ltd.
Completes sale of Dryden operations Feb 15
Joins newsprint price increase Mar 11
To merge with parent Sep 17
Approves amalgamation Dec 19

Riegel Products Corp.
Indicted in price fixing Apr 21

Riverside Paper Corp.
Changes its name to Amricon Corp. Oct 23

Rolland Inc.
To increase paper machine speed Feb 19
To complete 1974 project Dec 17

S

St. Anne-Nackawic Pulp & Paper Co.
Fire destroys scrubber (B.C.) Aug 33

St. Joe Paper Co.
Energy conservation program slated Mar 21

St. Lawrence Pulp & Paper Corp.
To start up recycled mill (N.Y.) Apr 19
Shuts down Ogdensburg mill (N.Y.) Oct 19

St. Raymond Paper Ltd.
Strike settlement reached Aug 13

St. Regis Paper Co.
Resumes plan for machine at Sartell Jan 13
Settles antitrust case Feb 23
Enters joint venture exploration Feb 25
To close Ypsilanti container plant Feb 27
Drops plans for hydrolysis project Feb 29
Sartell to get new LWC machine Mar 17

Indicted in price fixing Apr 21
Wood boiler planned (Maine) Apr 27
Class-action suits filed May 19
Consolidation of carton plants May 27
Sartell to get TMP plant (Minn.) Jul 19
Strike settled at Sartell (Minn.) Aug 13
To make debt offering Aug 23
Potential lime kiln fuel (Fla.) Aug 137
May buy insurance company Sep 17
Looses Alberta woodlands bid Sep 19
Delays new boiler system at Bucksport Oct 23
DOE funds hydrolysis study Dec 25
Buys Minco Industries sawmill Dec 31

Saxon Industries Inc.
To buy Westvaco plant (Pa.) Apr 33

SCM Corp.
Management wins control of board Jan 17
Management wins control of board Dec 19

Scott Paper Co.
Capital spending jumps 40% in 1980 Jan 15
Waste treatment facilities on-line at Mobile Feb 98
Increases tissue prices Mar 11
Port Huron acquires mill (Mich.) Apr 21
Indians near suit settlement (Maine) May 19
Raises tissue prices Jun 11
Plans Maine boiler project Jun 31
Tests new wet-formed tissue Jul 23
Workers strike Winslow (Maine) Aug 13
May close Sandusky plant (Ohio) Aug 19
Everett mill wins API/NFPA award Aug 33
Mobile mill wins API/NFPA honor Aug 33
Is fined for missing pollution deadline Aug 33
Settles antitrust suit Nov 21
Strike ends at Mobile mill (Ala.) Nov 23
Strike settlement reached (Maine) Dec 21
Log sales' contribution down Dec 29
Vibration-monitoring program Dec 64

Simpson Paper Co.
Cancels cogeneration plan Jan 29
Acquires Weyco paper mill (Pa.) May 19

Simpson Timber
Joint Northwest bargaining planned Jun 19

Sonoco Products Co.
Buys interest in Domtar can unit Jan 33
Enters lease agreement with Loroco Apr 21
Gains two cylinder mills Apr 21
Opens solid-fiber plant (Okla.) Sep 37

Sorg Paper Co.
Plans deinking system Dec 15
Dissidents reach board Dec 19

F. F. Soucy Inc.
Quebec okays Gaspé newsprint mill Nov 15

Southeast Paper Manufacturing Co.
Subsidiary supplies wastepaper Jul 100
May add new machine (Ga.) Sep 19
Wet suppression checks coal dust Oct 157

Southwest Forest Industries
Hearst purchases additional stock Jan 17
Snowflake project "on hold" (Ariz.) Jun 21
May switch machine to newsprint Sep 21
E.F. Hutton owns 10.2% of its stock Oct 15
Discussing acquisition of Knox Lumber Nov 31
To buy six container plants Nov 31
To acquire Knox Lumber Dec 31

Spaulding Fibre Co.
Adds cylinder machine (N.H.) Aug 17

Spruce Falls Power & Paper Co. CPU talks break down	Jun 19	U.S. Gypsum Co. Antitrust case settled	Apr 21	Joint Northwest bargaining planned	Jun 19
		To double capacity of board plant	Nov 31	To boost recycling effort	Jun 25
Stevens Paper Mills Inc. Board mill reopened (Conn.)	Oct 17	Completes board plant expansion	Dec 31	To raise chip prices to Japan	Jun 27
Stone Container Corp.				Outside hiring slows	Jul 15
Approves expansion program (S.C.)	Apr 19			Volcano causes mill downtime	Jul 17
T		W		Columbus gets permit (Miss.)	Aug 17
Tahsis Co. New bleached-pulp cleaning system	Mar 96	Wausau Paper Mills Co. Monarch acquisition sought	Jan 17	Auditors end qualifications	Aug 31
		Acquires Monarch	Feb 13	Fined for missed pollution deadline	Aug 33
Tembec Forest Industries Inc. Finances expansion program	Mar 21	Settles antitrust suit	Nov 21	Improves boiler efficiency (Wash.)	Sep 196
		Westfield River Paper Co. Indicted in price fixing	Apr 21	Reaches new chip export price	Oct 11
Temple-Eastex Reaches labor agreement at Evadale	Oct 21	Class-action suits filed	May 19	Orders sludge treatment unit	Oct 23
Thilmany Pulp & Paper Co. Auto sales slump shuts mill	Jul 15			Agrees to acquire Menasha mill	Nov 19
Toypack Inc. Nearing decision on pulp mill site	Nov 17	Westvaco Corp. Researches evaporator scaling	Mar 156	Workers ratify contracts (Ark.)	Nov 23
		To build gas pipeline (Md.)	Apr 27	Begins site work on panel plant (Mich.)	Nov 31
Union Camp Corp. Computer energy management system at Franklin	Feb 123	Saxon to buy plant (Pa.)	Apr 33	Reports 57% seedling mortality	Nov 33
		Seven die in fire (Va.)	May 17	New chip export prices	Dec 11
Plans oxygen-based bleach line plant	Mar 21	New power boiler (Ky.)	May 25	Weyerhaeuser Canada Ltd. To consolidate two sawmills (B.C.)	May 27
Major power plant program planned	Jun 21	Satellite longwood chip mill on-line	Jul 80	Installs moisture-measurement system	Oct 178
To add power boiler (Ga.)	Jul 31	Bids for joint settlements	Aug 31	Whippany Paper Board Co. Loan to put mills back in operation	Mar 15
Reaches settlement with workers	Aug 13	Wins API/NFPA award	Aug 33	Restarts five mills	Apr 21
Adds linerboard in Montgomery (Ala.)	Aug 15	Uses chip density factors to inventory	Sep 137	Chandler merger postponed	Jul 25
To make debt offering	Aug 23	Settles antitrust suit	Nov 21	Chandler merger dropped	Aug 25
Universal Folding Box Co. Inc. To expand box plant (N.J.)	Oct 33	Weyerhaeuser Co. Raises prices of chips to Japan	Jan 11	GNN takeover bid falters	Nov 19
		To expand disposable diaper production	Jan 33	Whonock Industries Ltd. To buy part of Rayonier Canada	Oct 13
		To build container plant (Ore.)	Jan 33	Willamette Industries Inc. Improvement project for Western Kraft	Jan 15
		Withdraws hydrolysis proposal	Feb 29	Buys Louisiana lumber company	Mar 17
		Interested in low-cost alcohol from cellulose	Feb 29	To add new machine (Ky.)	Apr 17
		Closes some product lines	Mar 31	Mill shut down by strike	Nov 23
		New chip export prices to Japan	Apr 11		
		Simpson acquires mill (Pa.)	May 19		
		Landfill generates steam (Wash.)	May 129		

Index by Foreign Country

Argentina Scott selling interest in Cellulosa	Jun 33	Jari mill might be closed	Dec 33	Kaukas Oy orders two pressurized grinders	Feb 29
Scott sells interest in Cellulosa Jujuy	Jun 33	Suzanofeffer uses new bleaching process	May 98	Ingerois to rebuild board machine	May 29
APM studies plans for expansion	Jun 35			Kajaani Oy orders newsprint machine	Jun 35
Australia Australian Paper to build pulp mill	Feb 33	Cameroon Cellucum pulp mill at startup	Jun 35	Kymi Kymmene to add paper machine	Jun 35
AP&P considers expansion	Feb 33			Enso-Gutzeit orders new paper machine	Sep 39
AP&P revives Wesley project	Dec 33	Chile Studying joint-venture pulp mill	Jun 33	Metsäliiton plans machine	Oct 35
Bathpine to build pulp mill	Dec 33			Metsäliiton machine to be Valmet unit	Dec 33
Austria Bunzl & Biach Ortmann mill to be sold	Mar 33	China To invest in New Zealand Mill	Jul 35	Sunila mill to be rebuilt	Dec 33
Papierfabrik Arland gets new owners	Mar 33	Paper industry emerges	Aug 88	Kymi Kymmene plans new machine	Oct 35
Pölsner Zellulose & Papierfabrik to build kraft mill	Mar 33	Cuba Jatibonico mill underway	Jun 35	Tampella to add newsprint machine	Nov 35
Belgium Schickedanz to take over Mabelpap	Jun 33	Fiji MK Hunt developing mill project	Jul 35	France Rhône-Poulenc Textile signs with ITT Rayonier	Feb 25
Intermills to get government aid	Nov 33			Papeteries Emin-Leydier's new testliner machine	Mar 66
Brazil Braskraft Florestal plans stepped up	Jan 35	Finland Yhtneet Paperitehtaat Oy plans expansion	Jan 35	GEC granted moratorium on payments	Oct 35
Jari Florestal e Agropecuaria nears target production	Feb 33	Kemira Oy Sateri signs with ITT Rayonier	Feb 25	MB wants to sell 30% GEC	Oct 35
				P&W interested in Cellulose D'Aquitaine	Oct 35
				Federal Republic of Germany Holzmann & Cie. orders pressurized grinders	Feb 29
				Feldmühle AG negotiating with Swedes	Jun 33

IP linerboard machine bought	Jun 33	new machine	Mar 33	Kopparfors is target of Feldemuhle	Jul 35
Schickedtz to take over Mabelpap	Jun 33	K-C mill on-stream at Orizaba	Mar 33	Billerud-Uddeholm to upgrade	
Feldmuhle targets Kopparfors	Jul 35	K-C starts up new tissue machine	Mar 33	board machine	Aug 35
G-P, ErWePa sign R&D agreement	Dec 27	Mexicana de Papel Periodico has		Delary to close in 1981	Aug 35
		new newsprint machine	Mar 33	Emsfors mill to close in 1980	Aug 35
Hungary		Papeles Ponderosa starts up		Fiskeby to double tissue capacity	Aug 35
Szolnoki Papirgyar to get twin-wire	Jan 35	folding boxboard machine	Mar 33	NCB major restructuring program	Aug 35
		Productora Nacional de Papel Destintado		Södra Skogsägarna slows closures	Aug 35
		deinked newsprint	Mar 33	Stromsnas to close in 1981	Aug 35
Indonesia		Celulosicos Centauro's new machine	Apr 35	Holmens Bruk's tests new	
Kertas Letjes to get integrated mill	May 29	K-C to build new pulp mill	Aug 35	wastewater cleaning process	Sep 33
Chung Hwa, Indah Kiat plan pulp mill	Oct 35			Norrlands Skogsagares Cellulosa	
PT Inhutani forms forest				restructuring turned down	Sep 39
products venture	Oct 35			Stora Kopparberg to raise capacity	Nov 35
		Netherlands		Billerud expands plans for Skoghall	Dec 33
Iran		CZ to write off Van Gelder	Aug 35	Domsjö/NCB mill may be abandoned	Dec 33
Stadler-Hurter equipment to be sold	Nov 19	Van Gelder seeks refinancing	Nov 35		
		Refinancing of Van Gelder mill	Dec 33		
				Switzerland	
Ireland		New Zealand		Kartonfabrik Niedergosgen uses	
Smurfit to raise stake in Alton	Nov 19	Pan-Pac plans major changes	Jun 35	nuclear power	Feb 33
Smurfit buys additional Alton shares	Dec 19	MK Hunt developing mill in Fiji	Jul 35		
		New Zealand Forest Products		United Kingdom	
		to make LWC	Jul 35	Bunzl Pulp & Paper to sell	
Italy		Tasman merges with two firms	Dec 33	Austrian interests	Mar 33
Cartiere del Sole improves				Star takes over Wolvercote	Jun 33
coated capacity	May 180			Domtar to close fine paper mill	Sep 39
Cartiere del Timavo improves		Norway		Delayed closure of newsprint mill	Sep 39
coated capacity	May 180	Tofte Cellulosefabrik to install		Domtar to close fine paper mill	Sep 39
Fabocart acquires idle Lucca mill	Jul 35	computer systems	Jan 35	Wiggins Teape gets Italian mill	Sep 39
Cartiere di Subiaco bought		Portugal		Bowater to close newsprint mill	Oct 35
by Wiggins Teape	Sep 39	Purtucel plans second paper machine	Jun 35	Reed to cut back production	
Fabocart Group to sell				at Aylesford	Oct 35
newsprint/printing	Sep 39			Bowater-Scott considers new	
		Scotland		tissue mill	Nov 35
Japan		Tullis Russell adds new fourdrinier	Feb 78	St. Anne's board mill to be closed	Nov 35
Tenma Paper plans board mill for U.S.	Jan 15	Wiggins Teape studies joint venture	Mar 33		
Honshu Paper's rising liner costs	Jan 35	Con-Bath shelves newsprint plans	Jun 31		
New chip prices proposed by Weyco	Apr 11	Wiggins Teape shelves newsprint plant	Jun 33		
Jujo Paper to rebuild machines	Apr 35			U.S.S.R.	
P&G to begin diaper production	Apr 35			Suffers paper shortage	Aug 35
Taio Paper to make carbonless	Apr 35	Spain		Releases report on five-year industry plans:	Nov 35
Daishowa to upgrade newsprint	May 29	Scott buys tissue mill	Apr 35	plans new mill in Siberia	
Daishowa installs new machine	Aug 35	Studying joint-venture in Chile	Jun 33		
Jujo to install coater	Aug 35			Vietnam	
Mishima plans carbonless production	Aug 35	Sweden		Delays at Scan's Bai Bang mill	Dec 33
Oji plans carbonless production	Aug 35	Nuclear loss would affect			
Production up 14%	Aug 35	industry production	Jan 35		
		Södra Skogsägarna to shut down 4 mills	Feb 33		
		Svenska Cellulosa to raise news capacity	Feb 33		
Malaysia		Kopparfors to improve environment	Mar 33		
Scott in joint venture with SPP	Aug 35	Eds Cellulosafabriks operates again	May 29		
Seven companies interested in complex	Oct 35	Iggesunds Bruk may add			
		third machine	May 29		
Mexico		Svenska Cellulosa to up spending	Jun 33		
Loreto y Pena Pobra SA to get		Fiskeby 'V' screen improves chips	Jun 73		
second tissue machine	Jan 35	Rockhammars Bruk uses new			
Carton Y Papel de Mexico starts up		pulp-drying process	Jun 186		
new machine	Mar 33				

Index by Author

A	B
Allan, David R.—Feb 175, May 71, May 178, Jun 109, Aug 75, Oct 85	Bake, Thomas L.—May 161
Almberg, L.—Mar 92	Baker, Eugene R.—Aug 140
Atack, Douglas—Jun 70	Balthazard, Mark J.—Apr 103, Dec 98
Atkinson, E.S.—Oct 152	Bayliss, Martin—Aug 64
Attwood, Brian W.—Apr 120	Beadle, W.C.—Apr 96
	Beauchemin, Norman J.—Apr 146, May 188
	Beyer, Merv—Oct 82
	Blethen, William—May 186
	Bonar, Len—Mar 119
	Bracken, Ken—Sep 107
	Brown, Clarence—Dec 218
	Brush, B.F.—Aug 144
	Buchanan, Bruce—Mar 60
	Buckingham, Robert W.—Nov 119
	Bundy, Richard P.—BG 50
	Byrd, Robert V.—May 100

C

Cartledge, Gene—Jan 220
 Casteline, John—Oct 157
 Chandrasekaran, S.—Nov 100
 Chang, Hou-Min—Mar 87
 Clephane, Thomas P.—Nov 72
 Cody, Harold M.—Feb 107, Jul 158, Jul 160,
 Jul 180, Dec 88
 Coleman, Matthew J.—Dec 108
 Cormack, A.D.—Jul 132
 Crossland, William E.—Nov 68
 Cunningham, R.—Sep 110

D

Date, John L.—Mar 160
 Deeg, Rudi F.—Jul 154
 DeMiller, Teresa—Sep 137
 DeRoy, G.L.—Mar 63
 Derbridge, Gary—Feb 128
 deSouza, T.L.C.—Jul 124
 Detrick, Maureen—Mar 140
 Dollard, Ed—27
 Dove, Norman F.—Apr 174
 Dusenbury, M.R.—May 184

E

English, Marvin—Feb 148
 Erskine, K.J.—Apr 74
 Evans, John C.W.—Jan 155, Feb 78, 155, Apr
 152, Jun 76, Jul 74, Aug 93, 112, 115, Sep
 102, Oct 123, Oct 126, Oct 184, Nov 94,
 Nov 124, Dec 96, Dec 140

F

Farin, William T.—Nov 119
 Farrelly, John D.—Sep 196
 Ferguson, James—May 69
 Fern, Bo—Sep 80
 Fletcher, Roy—Apr 72
 Fredrickson, R.E.—Aug 144

G

Ganguli, Kalyan K.—Oct 108
 Gleason, William A.—Jul 70
 Goble, A.L.—Nov 147
 Good, W. Ralph—Apr 106
 Goodstein, Janet—Dec 118
 Gould, Matthew—Jul 104, Nov 144
 Grawburg, Brian W.—Jul 188
 Green, Terry—Feb 80
 Greiner, Thomas S.—Oct 158

H

Haas, Leonard—May 180, Aug 64
 Habrie, R.A.—May 90
 Hahn, Jr., T. Marshall—Jul 274
 Hall, Donald D.—Feb 104, Jun 188, Oct 102
 Harrison, Ray—Mar 156
 Hawrylak, M.—Sep 191
 Heitner, Cyril—Jun 70
 Hene, Lennart A.—Dec 142
 Hergert, Herbert L.—Mar 110
 Hoffman, Roger—Sep 164
 Hooper, A.W.—Jul 132
 Hoynalanmaa, Mikko—Aug 97
 Hulsey, Ken—Dec 119
 Humbet, Paul A.—Feb 178

I

Irons, Paula J.—Jan 135, Sep 134
 Izlar, Bob—Jun 79

J

Jackson, Michael—Jun 70
 Jamieson, A.—Mar 92
 Jamieson, John—Feb 151
 Jones, Daniel G.—Dec 135
 Joyce, Thomas W.—Apr 171

K

Kaasalainen, Heikki—May 158
 Kairamo, Kari—May 150
 Kaiser, Dan—May 63
 Kaljunen, Raimo—May 158
 Kallmes, O.J.—May 186
 Karnis, Alkis—Jun 70
 Katzen, R.—Aug 144
 Keating, James L.—Jun 73
 Kennedy, Ted C.—Sep 74
 Kelly, D.—Sep 110
 Kerkhof, Michael—Aug 137
 Kien, Julian M.—Feb 35, Apr 37, Jun 37, Oct
 39, Dec 35
 Kindron, R.R.—Nov 127
 Kinstler, Thomas J.—Sep 130
 Kline, R.E.—Mar 165
 Knowles, Elizabeth—Oct 72, Oct 77
 Kohlvik, H.—Jun 182
 Kojo, Martti—Nov 174
 Kramm, Douglas J.—Sep 77

L

Lake, Michael A.—Feb 130
 LaPorte, Richard J.—Dec 64
 Larsen, Jack—Aug 228
 Laun, Louis F.—Mar 220
 Law, Charles—Oct 72, Oct 77
 Lewis, Kenneth G.—Dec 94
 Linderot, Jan—Apr 99
 Lindsey, Allan M.—Aug 118
 Lohrberg, Karl—Oct 185
 Lord, John—Mar 116
 Lord, S.—Jul 77
 Lowe, Kenneth E.—Aug 88

M

Magiera, E.—Sep 191
 Martin, Stanley A.—May 66
 May, Oscar W.—Mar 68
 McIvor, A.—Sep 110
 McKinnon, D.R.—Dec 58
 Mies, Willard E.—Jul 129, Sep 160
 Montroy, Dan—Jun 106
 Moonen, F.H.—May 258
 Morgan, J.—Nov 100

N

Nenow, Nic—Apr 177
 Nowak, William J.—Sep 170

P

Pace, Norma—Sep 292
 Parham, Russell A.—Mar 110
 Perkins, Joseph K.—May 96
 Pickering, G.D.—Oct 278
 Plunkett, Thomas P.—BG 50
 Pojasek, Robert B.—Nov 144
 Pollitzer, Stephanie—Jan 127
 Popovich, Luke—Jan 39, Feb 39, Mar 37, Apr
 41, May 33, Jun 41, Jul 39, Aug 41, Sep 43,
 Oct 43, Nov 39, Dec 37
 Poynton, James P.—BG 24
 Prahacs, S.—Jul 124
 Preikschat, Ekhard—Jun 136

Q

Quarles, John—Nov 242
 Quick, Paul M.—Sep 83

R

Reese, Richard A.—Oct 129
 Reeser, David M.—Sep 140
 Reis, R.—Nov 100
 Reitz, Bartley L.—Aug 121
 Rhyne, J. Bert—Aug 137
 Riley, Robert G.—Mar 142, Sep 166
 Rindgahl, Larry V.—Mar 96
 Rivers, Morrie—Jan 185, Feb 215, Mar 162,
 Mar 181, Apr 213
 Rizzardi, John—Sep 188
 Rogers, H.A.—Jul 189
 Russell, Mike—Oct 178
 Russo, August B.—Sep 198
 Ryan, Tom—Jun 191

S

Sawtell, Joseph O.—Apr 72
 Schenker, Leo—Apr 272
 Schiller, Fran—Apr 124, Jul 164
 Schwartz, Joseph A.—Sep 196
 Scollard, Neil—Feb 181
 Scudder, Richard B.—Jun 276
 Sherlaw, Lawrence A.—Jan 160
 Siegmund, J.W.—Jun 182
 Sim, George A.—BG 44
 Slater, Mark D.—Mar 160
 Slinn, Ronald J.—Jun 134
 Smallwood, Robert—Feb 101
 Smith, Jack—Jun 166
 Smith, Jack C.—Sep 107
 Smith, Kenneth E.—Jan 102, 152, Feb 98,
 Mar 65, Apr 126, May 155, Jun 128, 163,
 Jul 94, 100, 183, Nov 151, Nov 170, Dec
 114
 Smith, R. Duane—Jul 154
 Stonis, Anastas—May 98
 Strelow, Roger—Feb 266
 Strunk, William G.—Jun 156

T

Taylor, Lawrence—Dec 135
 Thayer, Franklyn W. Jr.—Jan 109
 Thomasson, Fred—Feb 123
 Torborg, Robert H.—Mar 134
 Tuhkanen, Mikko—Dec 68
 Tull, R.D.—Dec 58

U

Ulmer, William J.—BG 53

W

Waldestam, S.—Mar 92
 Wallace, Barclay W.—May 93
 Walker, P.H.—Apr 74
 White, Carl B.—BG 62
 Wicks, Laurie D.—Jun 104
 Wilson, Fillmore G.—Jun 99
 Winne, David—Sep 170
 Wolpert, Vladimir M.—Jan 108
 Wong, A.—Nov 74
 Woodruff, Howard F.—BG 48
 Woolridge, Joe—Nov 154
 Wysopal, Carl—Dec 92

Z

Zitrides, Thomas G.—Feb 172

